

AP20 REG'D PCT/10 09 MAR 2006

Windmüller & Hölscher KG
Münsterstraße 50
49525 Lengerich/Westfalen

September 2, 2004

Our reference: 8459 WO B WEB

Printing Roller Comprising A Rapidly Exchangeable Roller Mandrel

Claims

1. Printing unit comprising
 - at least one exchangeable roller mandrel (5) of a printing or screen roller,
 - a coupling device (7), which occupies a usually front coupling location (16) of the roller mandrel (5) at the receiving location (13) of the coupling device (7), and which transmits the torque, which is necessary for rotating the roller mandrel (5) to said roller mandrel (5),
 - wherein the coupling device (7) and the roller mandrel (5) are formed in such a manner that the coupling location (16) of the roller mandrel (5) can be brought to the receiving location of the coupling device (7) by an axial motion (A) of the roller mandrel (5)

characterized in that

either the roller mandrel (5), at its coupling location (16) or the receiving location (13) of the coupling device (7), tapers in the axial direction of the roller mandrel (5).
 2. Printing unit according to claim 1
- characterized in that**

either the roller mandrel (5) at its coupling location (16) or the receiving location (13) of the coupling device (7) tapers conically in the axial direction of the roller mandrel (5).

3. Printing unit according to claim 1 or 2

characterized in that

the coupling location (16) of the roller mandrel (5) tapers and is located at one end of the roller mandrel (5).

4. Printing unit according to any of the preceding claims

characterized in that

the coupling device (7), which occupies the coupling location (16) of the roller mandrel at the receiving location (13) of the coupling device (7) clasps a bearing journal (6) with a fastener (17) that (17) engages in the radial direction centrally at the end of the roller mandrel (5).